

24

Date: Wednesday, 5/16/2007 8:08:42 AM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FLOAT SKIDTUBE ASSEMBLY
Job Number	: 32362A		
Estimate Number	: 10309		
P.O. Number	: N/A	Part Number	: D206642541
This Issue	: 5/16/2007	S.O. No.	: N/A
Prsht Rev.	: NC	Drawing Number	: D3274 REV D
First Issue	: N/A	Project Number	: N/A
Previous Run	: 32361A	Drawing Revision	: D
		Material	: N/A
Written By	: <u>John.05.16</u>	Due Date	: 6/10/2007
Checked & Approved By	: <u>John.05.16</u>	Qty:	1 Um: Each
Comment	: Est Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM Est Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
-----	----	------------------



Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D206-642-541 CHG003

N/A
Packed with 32358

2.0	D26001190	Extrusion Round 3" 206
-----	-----------	------------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2600-1-190 3" OD Tube

B24841

DP 7-5-18

3.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
-----	----------------	-------------------------



Comment: LANDING GEAR RESOURCE 1

1-Cut D2600-1 to 190.00" in length as per Dwg D3274 and Deburr ends

2-Drill #40 Aft cap pilot hole using DT8025

3-Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

4-Remove inner indexing ridge on aft end of skidtube as per Dwg D3274

5-Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

DP
7-5-22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Seq. #:

Machine Or Operation:

Description:

4.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid Etch and Alodine tube as per QSI 005 4.1

JD 7-5-22

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

pm 07-06-02 (1)

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE pm 07-06-07 (1)

7.0

D3282041

I-Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3282-041 Float Web

B32405

EL 7-6-7

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open Ø0.313" crossbolt spacer holes using DT8743 as per Dwg D3274

2-Open Ø0.375" crossbolt spacer holes using DT8744 as per Dwg D3274

3-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

4-Bond web in place as per Dwg D3274 & QSI 015.

A/R Sikaflex-291

Sikaflex expire date:

Start: 10:30

Finish: 07-06-11

(Adhere for 12 hours)

M 103651

7-10-1

Time: 7-6-7

Time: 8:30

N 7-6-7

DP 7-6-7

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE pm 07-06-11 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Bend tube using program D3274 as per Dwg D3274. Install drop pins in cross bolt spacer holes to maintain web position. *pm 07-06-11①*

2-Cut Fwd end of tube to length as per Dwg D3274 *pm 07-06-11①*

3-Remove inner indexing ridge on Fwd end of skidtube as per Dwg D3274 *pm 07-06-18②*

4- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2 OPEN HOLES TO .297" *pm 07-06-18②*

5-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES) REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES *pm 07-06-18②*

6- Countersink crossbolt spacer holes as per Dwg D3274 *pm 07-06-18②*

11.0

D32851

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3285-1

Fwd Cap

B30293

BE 07-06-27

12.0

D2649

Crossbolt Spacer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number Description Batch

12 D2649

Crossbolt spacer

B21926

BE 07-06-27

13.0

D32751

Crossbolt Spacer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number Description Batch

12 D3275-1

Crossbolt spacer

B31072
B29567

BE 07-06-27

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Job Number:



Seq. #:

Machine Or Operation:

Description:

14.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld Fwd Cap as per Dwg D3274 and QSI 004. Use aluminum rod.

A/R Aluminum Rod

M 104221 / M 104305

BE 07-06-27

2-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod

A/R Aluminum Rod

M 104221

BE 07-06-27

3-Grind welds flush to Fwd cap on top surface only.

BE 07-06-27

4-Grind cross bolt welds flush as per Dwg D3274. Masking Tape access to inside of the skidtube *FD 07-06-27 (1)*

5-Counterbore 5/16" x 0.750" deep as per Dwg D3274. Use DT8743 visual aid Jig and deburr. *FD 07-06-27 (1)*

15.0

QC59

WELD INSPECTION



QC #5 En 6766/28 (1)



Comment: Inspect weld and Counterbore. Inspect for foreign objects as per QSI 024

FD 07-06-28 (1)

16.0

POWDER COATING

POWDER COATING



M 104144



(1)

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M-L 07/06/30

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FD 07/06/04 (1)

18.0

D3415041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

Batch

1 D3415-041

Nut Plate

B 30837

19.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description

Batch

FD 07/07/04 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number: 32362A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description:

2 CCR264SS3-3 Rivet

m14651

20.0

CR3212403

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CR3212-4-03 Rivet

m15918

21.0

ALS71032130

Insert



Comment: Qty.: 78.0000 Each(s)/Unit Total: 78.0000 Each(s)

Insert

Batch: m103618

FL 07/07/04 ①

22.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.

A/RN/ALPS-3 m104161

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a

A/R Sikaflex-291 m104732

Sikaflex expire date: 07/10

FL 07/07/04 ①

23.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect Nut Plate & Inserts

24.0

AN3C4A

BOLT



Comment: Qty.: 80.0000 Each(s)/Unit Total: 80.0000 Each(s)

BOLT

Batch: m104625

FL 07/07/04 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 32362A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

D353515

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B31990

26.0

D353523

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B32411

27.0

D353535

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B31992

28.0

D353539

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B32412

29.0

D353615

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B30753

30.0

D353623

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B32413

31.0

D353635

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B31996

FL 07/07/04 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number: 32362A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

32.0

D353639

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B32414

33.0

D35371

WEARPAD



Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

WEARPAD

Batch: B32539

34.0

D35373

WEARPAD



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPAD

Batch: B32789

35.0

AN960C10L

washer



Comment: Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick:

Qty Part Number

Description Batch

80 AN960C10L

Washer

m104885

36.0

NAS1515H3L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 NAS1515H3L

Washer

m104663

37.0

D34131

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3413-1

Ring

B32408

38.0

AN4C5A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

FL 07/07/04 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number: 32362A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description:

1 AN4C5A

Bolt

m/18918

39.0

AN960C416

WASHER

B



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960C416

Washer

m/00993

40.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2646

Aft Cap

03/335

FL

07/07/04 ①

41.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

2-Install wearpads & gaskets as per Dwg D3274.

3-Install ring as per Dwg D3274

A/R Sikaflex-291

m/104732

Sikaflex expire date:

07/10

4-Inspect for foreign objects as per QSI 024

5-Spray inside of tube on both sides of web with LPS-3

A/R LPS-3

Batch: m/104161

6-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-291

m/104732

Sikaflex expire date:

07/10

FL

07/07/04 ①

42.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

FL

07/07/05 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: 15 Date: 07/09/06
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

43.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and stock

Location: _____

PP 32358

5/16/07 ① SP

44.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

① 5/16/07

Job Completion



U 5/16/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY	SCALE NTS
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

RELEASED07.02.12 **[Signature]**

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

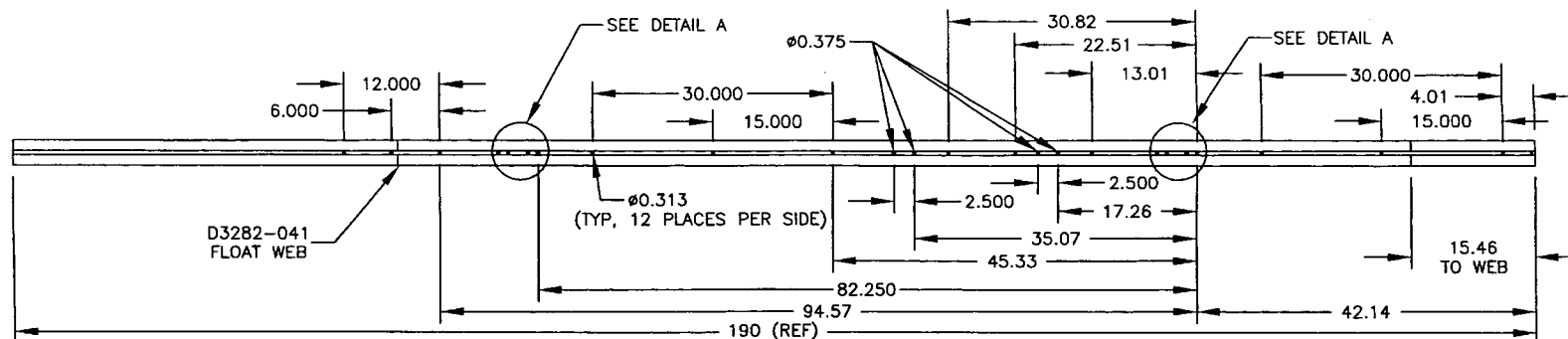
WITHOUT NOTICE

WORK ORDER

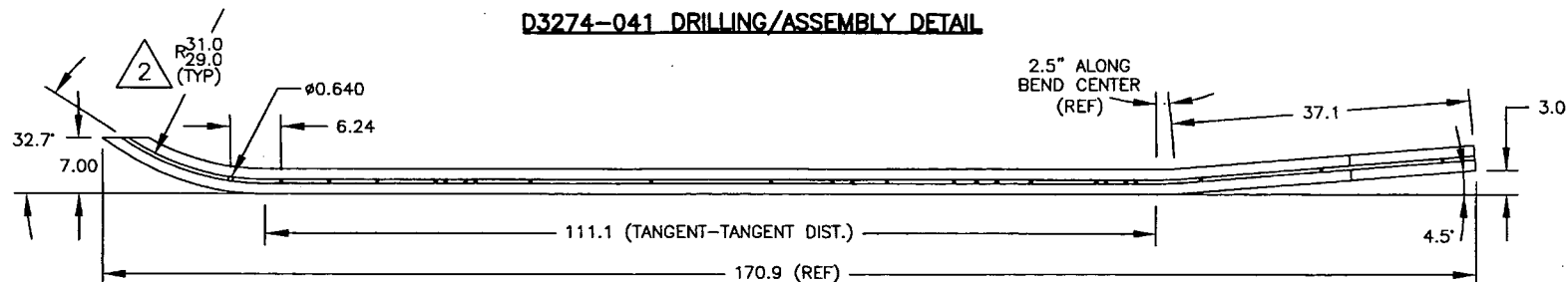
NO 32362A

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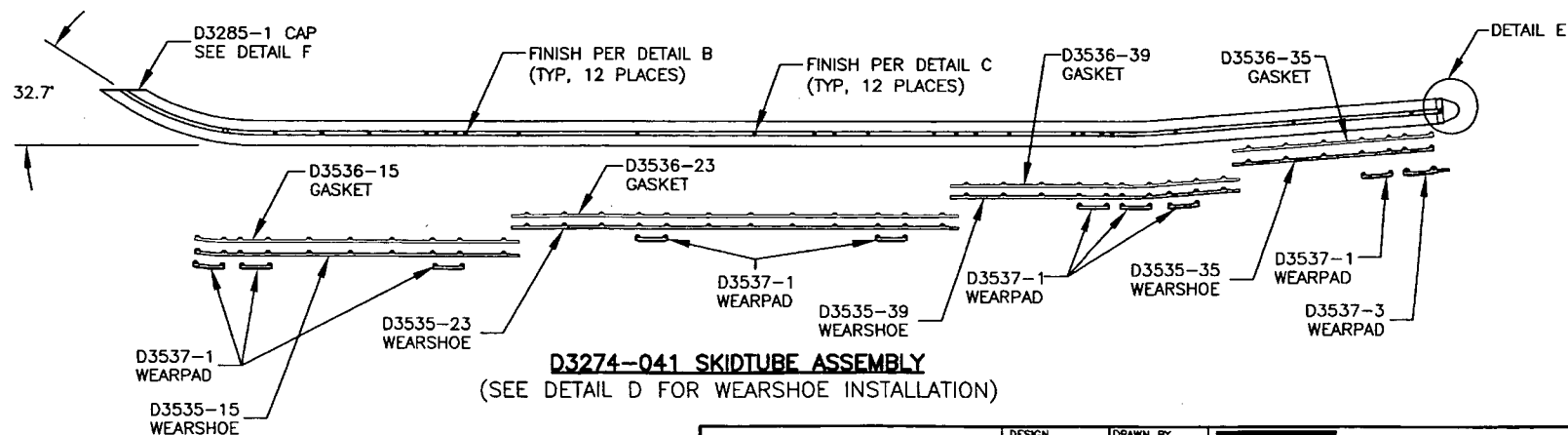
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D3274-041 DRILLING/ASSEMBLY DETAIL



D3274-041 BEND/DRILLING DETAIL



D3274-041 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

NO. 22362 A
WORK ORDER
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ENGINEERING
SUBJECT TO AMENDMENT
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RETURN TO
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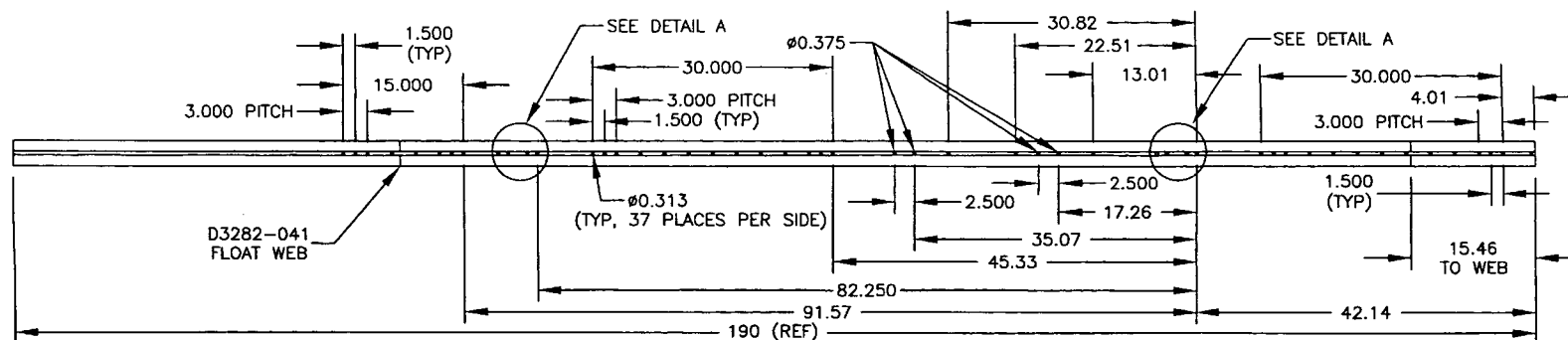
RELEASED

07.02.12

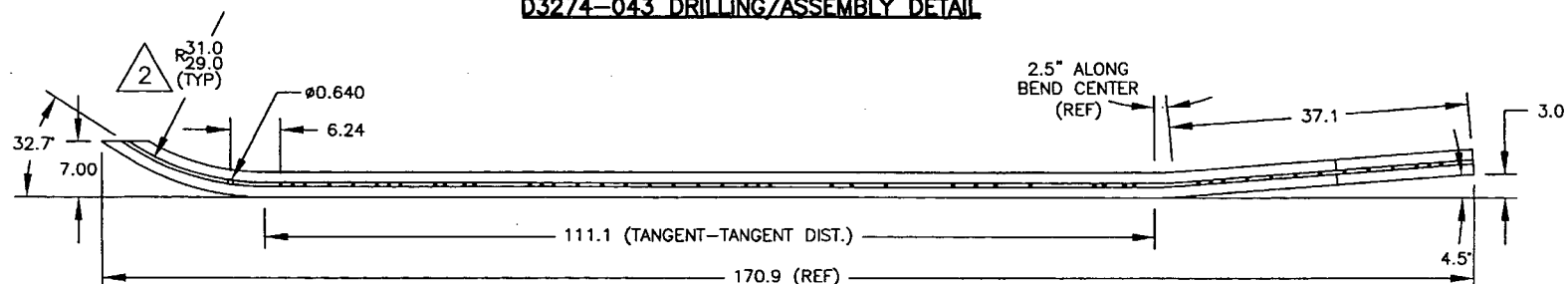
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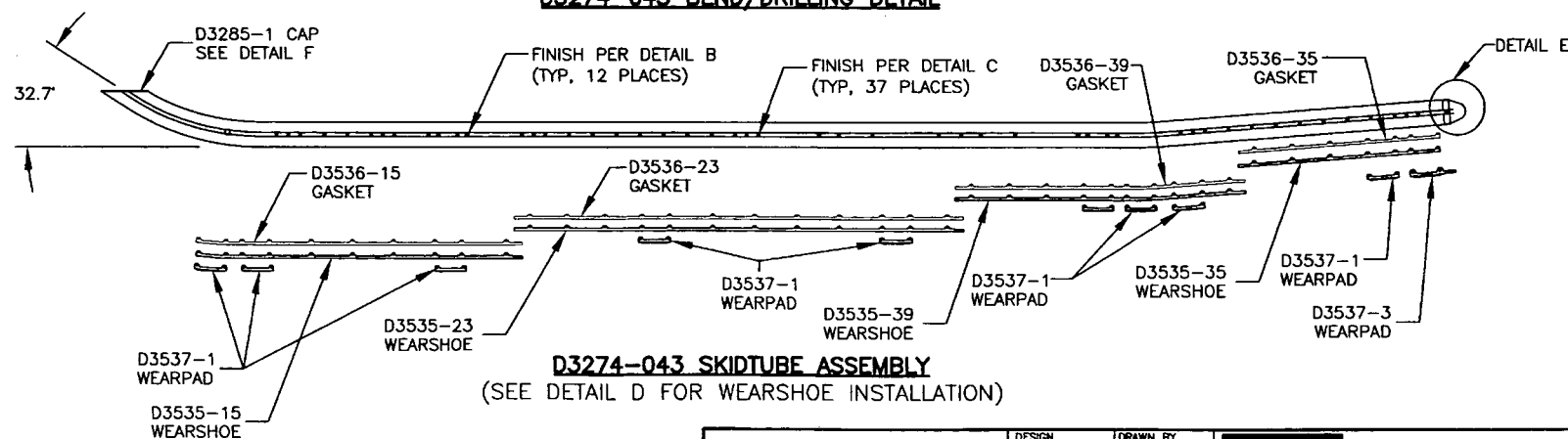
DESIGN	CP	DRAWN BY	PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA
CHECKED	#	APPROVED	#	DRAWING NO. D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. 0 SHEET 2 OF 4 SCALE 1:15



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

NO. 32362 A
WORK ORDER
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
ENGINEERING
RETURN TO
SHOP COPY

RELEASED

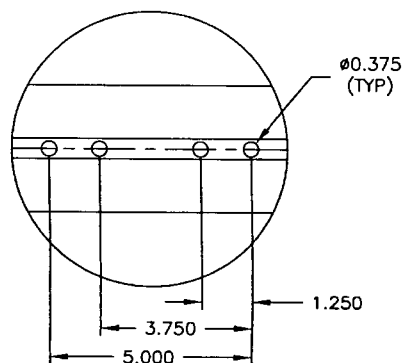
07.02.12

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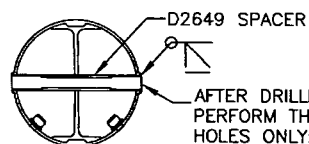
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DESIGN	CP	DRAWN BY	PH	DART DART AEROSPACE USA, INC.	REV. D
CHECKED	H	APPROVED	H	PORT HADLOCK, WA	SHEET 3 OF 4
DATE	06.12.19	DRAWING NO.	D3274	TITLE	SKIDTUBE ASSEMBLY
				SCALE	1:15

DETAIL A: DRILL DETAIL

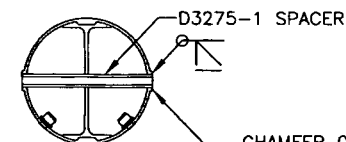


DETAIL B FOR 0.375 HOLES ONLY



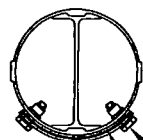
- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR 0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO 0.313x0.75 DEEP

DETAIL C FOR 0.313 HOLES ONLY



CHAMFER 0.030x45°
(TYP)

DETAIL D



- ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
AN960C10L WASHER (1)
(78 PLACES)

GASKET/WEARSHOE/WEARPAD (REF)

DETAIL E

- AN3C4A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(2 PLACES)
INSTALL WITH SIKAFLEX-241/-291

D2646 CAP

SEAL WITH
SIKAFLEX-241/291
ADHESIVE

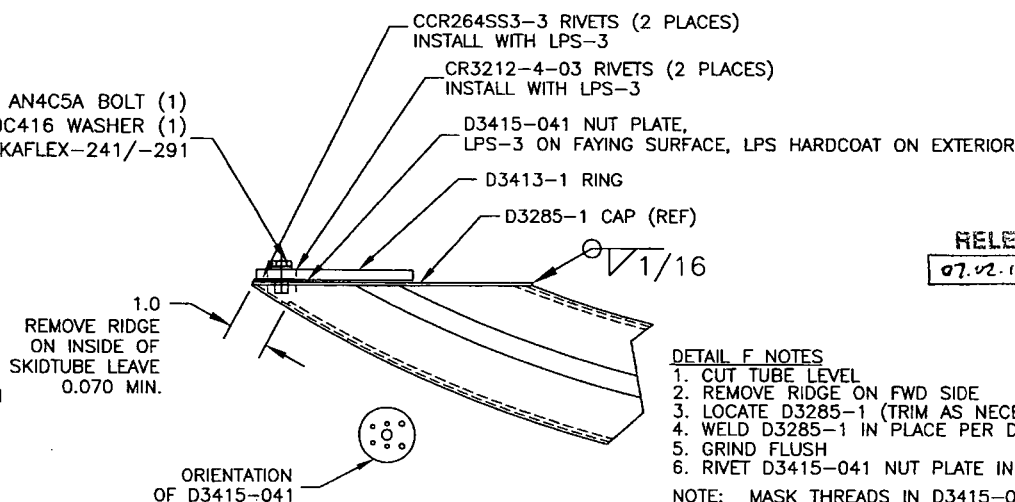
0.208 (2 PLACES)
DRILL PRIOR TO INSTALLING
D2646 CAP

BORE OUT END OF SKIDTUBE
TO 0.75 DEPTH AND 0.070 WALL

0.400

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DETAIL F: END FINISHING DETAIL



RELEASED
07.02.12

DETAIL F NOTES

1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D3285-1 (TRIM AS NECESSARY)
 4. WELD D3285-1 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

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DESIGN	CP	DRAWN BY	PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA
CHECKED	#	APPROVED	#	DRAWING NO. D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. D SHEET 4 OF 4 SCALE 1:3

NO. 114

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliot
Joint Welding Procedure Tig
Part number and Job number D206642541/B3297

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 01-06-20 Qualifier Pat Duval